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THE WESTERN ILLINOIS STATE TEACHERS COLLEGE

QUARTERLY

DECEMBER 1939

CONTENTS:

INTERNAL SURVEY
By
LOUIS M. SCHLEIER
and
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Published by the Western Illinois State Teachers College
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STATE OF ILLINOIS
HENRY HORNER, Governor

THE WESTERN ILLINOIS STATE TEACHERS COLLEGE

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CONTENTS:

INTERNAL SURVEY

—at the—

WESTERN ILLINOIS STATE TEACHERS COLLEGE

By

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FOREWORD

Guesses, traditions and personal opinions have long been rejected by science, especially physical science, but educational matters have until rather recently involved much discussion without much scientific data to substantiate the arguments presented. Now, however, educators everywhere are adopting the scientific method of attack on educational problems and such data as can be found are collected as evidence for any conclusions which are drawn.

The Western Illinois State Teachers College thoroughly endorses the scientific approach to the problems which confront teacher education in general, and to its own problems in particular. As a matter of fact it not only approves such a procedure, but it applies it whenever possible.

Many discussions have been held with respect to the quality of college students enrolled in institutions where teacher education is held as their chief function. In fact, perhaps almost as much discussion has been given to the relative quality of students in the different fields of teacher education. This college has become interested in these problems as presented by its own students. It has sought therefore to make a study of the data at hand with respect to its students enrolled in the college during the year 1938-1939, and its graduates over a five year period ending July 1, 1939. This bulletin contains the pertinent points in this study.

Personally it is "the opinion" of the writer of this foreword that the tests which are available and which were used may give an advantage to the academic experience of a student and perhaps penalize the students whose experiences and proficiencies lie in the artistic fields or in the industrial or vocational areas. Perhaps we shall need to revise our tests if they are to be fair to all concerned. It is, however, his "opinion" too that the study herewith presented is scientific in its procedure, and is the best that can be used to analyze this situation with the units of measure at hand. We should be reminded that one of the most difficult problems faced by the most exact sciences has been the discovery and development of accurate units of measure.

It is our hope that sister institutions may undertake the same kind of study of their student groups, so that our findings may be substantiated or discredited. We are interested in the discovery of the whole truth.

W. P. Morgan.

INTERNAL SURVEY
WESTERN ILLINOIS STATE TEACHERS COLLEGE

INTRODUCTION

The Western Illinois State Teachers College offers three four-year curriculums, one for elementary teachers, one for superintendents and elementary supervisors, and one for high school teachers and principals and special teachers. Under the latter, two special four-year curriculums are outlined. One is in Agriculture and the other is in Home Economics. These curriculums are known as Curriculum A, Curriculum B, and Curriculum C. Curriculum C comprises eighteen majors. These are Agriculture, Art, Biology, Chemistry, Commercial Education, English, French, Geography and Geology, Health and Physical Education for both men and women, History including Economics and Political Science, Home Economics, Industrial Arts, Latin, Library Economy, Mathematics, Music, and Physics.

It is the purpose of this study to analyze the student personnel of each of these curriculums and of each separate department.

It is only by such analyses that questions pertinent to the operation of the College may be answered. Some of these questions are: How many students and what per cent of the total student body are enrolled in each curriculum? How many students and what per cent of the total student body are enrolled in each of the separate departments? How do the students in the separate curriculums and departments compare in intellectual acuity, in the knowledge of the fundamental elementary branches, and in the mastery of the mother tongue? How do the separate groups compare in scholastic achievement?

An attempt will be made through comparisons, graphical representations, and other devices to present a concise picture of the entire student body of the college during the academic year 1938-1939.

Before beginning an analysis of any of the charts included in this study it should be said by way of explanation that during Freshman Week which precedes the formal opening of the College to all students, freshmen tests are administered to all in-coming freshmen. These tests are as follows: (1) the American Council on Education Psychological Examination, (2) the Teachers College Personnel Association English Examination, (3) the Teachers College Personnel Association Elementary Examination, and (4) the Bernreuter Personality Inventory.

Attention should be called to the fact that the slight differences in the totals in Charts I, II, and III are due to the fact that a number of students who were included in this study were transferred from other institutions of higher learning. Any person who has standing beyond

that of freshman rank is required to take only the Psychological Examination, unless the same examination as is given at Western was administered to the student in the college from which he was transferred.

THE PSYCHOLOGICAL EXAMINATION

How do the Students, as Groups, Registered in the Several Major Fields Compare in Intelligence?

In order to compare one group with the other groups it was thought best to use several bases upon which to make the comparisons: namely, the number in each group, the range in percentiles, the median percentile, and the percentiles at the first and third quartile points.

In Chart I the vertical scale shows the percentiles as determined by the national norms. For example, the point indicated by 50 is the median or fiftieth percentile point as determined by the national norms. The horizontal scale shows the curriculums, the major departments in each curriculum, and the number of students comprising each major.

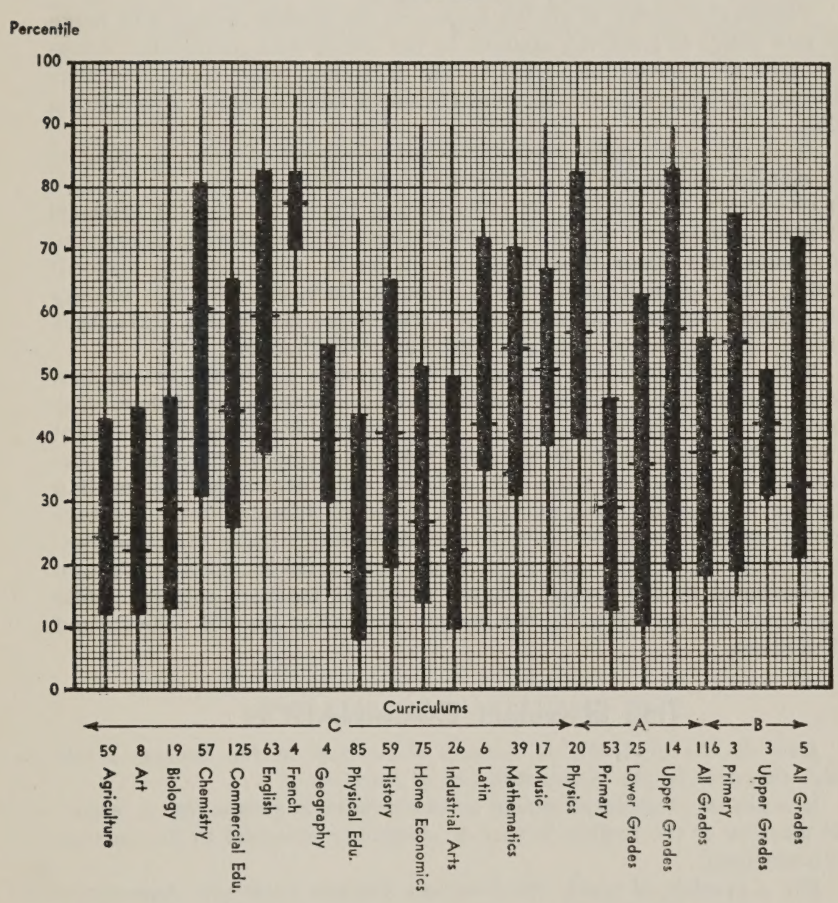
The heavy black bars represent the inter-quartile range. The lower limit of this bar marks the first quartile or twenty-fifth percentile point, the upper limit of this bar marks the third quartile or seventy-fifth percentile point. The line crossing this bar shows the median, or fiftieth percentile point. The narrow line extending below this bar represents the lowest or first quartile, and the lower limit of the percentile range. The narrow line extending above this bar represents the highest or fourth quartile, and the upper limit of the percentile range.

Chart I should be interpreted as follows: Fifty-nine students were enrolled in agriculture. The range in intelligence for this group was from the first to the ninetieth percentile for all college and university students.[1] The median percentile was 24.6; the first quartile point, 12.5; and the third quartile point, 43.1. One half of this group would be classified in the lowest quartile, and more than three fourths of them below the median for all college and university students.

[1] National norms were used in determining the rating of each student on the Psychological Examination.

CHART I

RANGE, MEDIAN, AND FIRST AND THIRD QUARTILE POINTS (BASED ON PERCENTILE RATINGS) FOR THE STUDENTS BY DEPARTMENTS AND CURRICULUMS ON THE AMERICAN COUNCIL ON EDUCATION PSYCHOLOGICAL EXAMINATION, WESTERN ILLINOIS STATE TEACHERS COLLEGE, 1938-1939



Another example might well be that of the English majors. Sixty-three students comprised this group. The range in intelligence for this group is from the first to the ninety-fifth percentiles for all college and university students. The median percentile was 59.5; the first quartile point, 38; and the third quartile point 82.5. One half of this group would surpass approximately sixty per cent of all college and university students throughout the United States. The upper quartile surpasses approximately 83 per cent of the national group.

The most superior of all the majors is the French group. The range for this group is from the sixtieth to the ninety-fifth percentile. Attention, however, should be called to the fact that there were only four students in this group and is therefore not a large enough sample to be valid.

If all the major groups were arranged according to rank in regard to the median percentiles, the following order will appear: (1) French, (2) Chemistry, (3) English, (4) Physics and Upper Grades, (5) Primary, (6) Mathematics, (7) Music, (8) Geography, (9) Commercial Education, (10) Latin, and Upper Grades of Curriculum B, (11) History, (12) All Grades, (13) Lower Grades, (14) All Grades, Curriculum B, (15) Biology and Primary Group of Curriculum A, (16) Home Economics, (17) Agriculture, (18) Industrial Arts, and (19) Physical Education.

The median percentile ratings of nine groups are above the median for all college and university students, while fourteen are below. The median score for the entire student body fell at the 46th percentile point of the 4,657 scores from 18 teachers colleges. According to the report based on 61,821 scores from 356 colleges and universities the median score for the entire student body at Western Illinois State Teachers College coincides with the 34th percentile point of these 61,821 scores.[2] These comparisons show that about 54 per cent of the students at Western are surpassed by the median student of the 18 teachers colleges, while 66 per cent are surpassed by the median student of the 356 colleges and universities.

THE ENGLISH EXAMINATION

How do the Students, as Groups, Registered in the Several Major Fields Compare in the Comprehension of English?

It is generally accepted among teacher-education groups that a reasonable mastery of the mother tongue is absolutely essential to the success of all teachers.

For a number of years, the Teachers College Personnel Association has been responsible for the preparation of a comprehensive examination in English. In 1938, this test was administered to and results returned

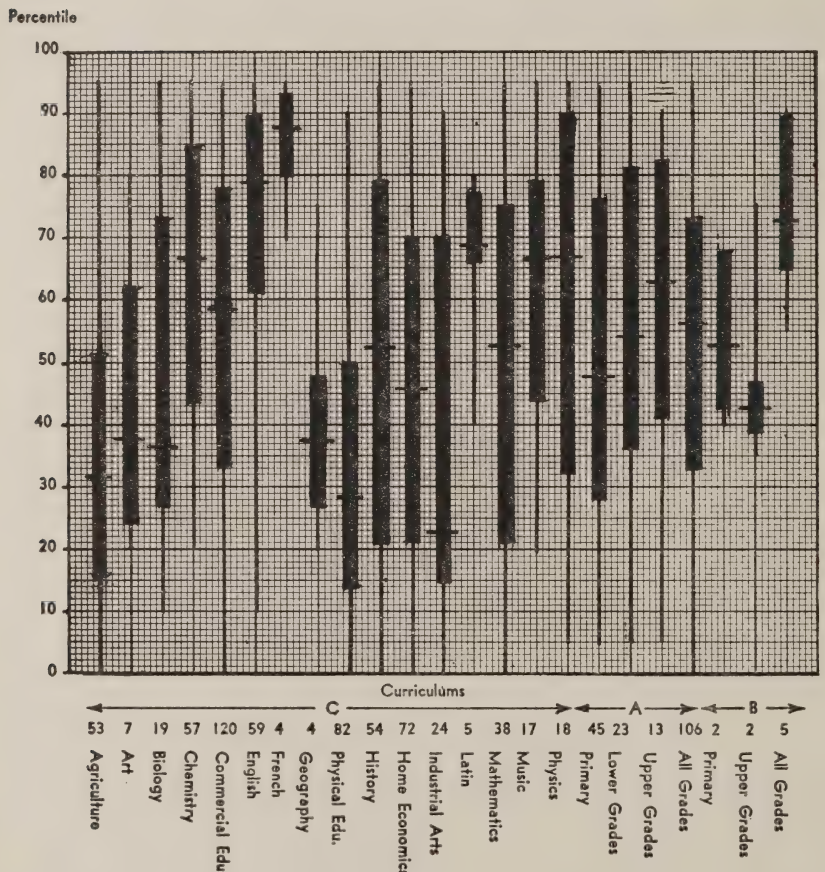
[2] Thurstone L. L., (et al), "The 1938 Psychological Examination," *The Educational Record*, XX (April, 1939), 278.

from approximately 6,000 students in twenty-seven colleges throughout the United States. The norms for that year were based upon the scores of those 6,000 students.

Chart II should be read and interpreted in the same manner as Chart I. An analysis of the chart representing the achievement of the several major groups on English will show that 14 of the 23 groups ranked above and 9 ranked below the median for all colleges reporting scores on the examination. Attention should be called to the fact that on the Psychological Examination, the results were just the opposite. This might be explained by the number of students involved and the types of institutions from which results were obtained. The major groups that ranked above the median were French, English, All Grade (B), Latin, Chemistry, Physics, and Music, Upper Grades (A), Commercial Education, All Grades (B), Lower Grades (A), Primary (B), Mathematics and History. Those majors that ranked below the median were Primary (A), Home Economics, Upper Grades (B), Art and Geography, Biology, Agriculture, Physical Education, and Industrial Arts.

CHART II

RANGE, MEDIAN, AND FIRST AND THIRD QUARTILE POINTS (BASED ON PERCENTILE RATINGS) FOR THE STUDENTS BY DEPARTMENTS AND CURRICULUMS ON THE TEACHERS COLLEGE PERSONNEL ASSOCIATION ENGLISH EXAMINATION, WESTERN ILLINOIS STATE TEACHERS COLLEGE, 1938-1939



A study of Table I will show the rank of each of the several major departments on the English Examination.

The scores from Western Illinois State Teachers College were compared with the 6,107 scores from 27 teachers colleges. The median score made by the entire student body at Western ranked at the 47th percentile point of the 6,107 scores. That is, approximately 53 per cent of the students at Western were surpassed by the median student for all teachers colleges.

THE ELEMENTARY EXAMINATION

How do the Students, as Groups, Registered in the Several Major Fields Compare in the Mastery of the Elementary Fields of Knowledge?

As was the case in regard to the English Examination, the Teachers College Personnel Association also publishes, distributes, and administers what is called the Elementary Examination. This examination consists of several parts, namely, Civics and History, Geography, General Science, and Arithmetic. It is not the purpose of this study to make an analysis of each individual part of the examination, but rather to make comparisons of the several departments on the composite scores made on the entire examination. An analysis of the Arithmetic section of the examination was published by Dr. H. Glenn Ayre[3] in September, 1939, and a complete analysis of the Civics and History and Geography sections will appear in a subsequent publication.

Fourteen of the major departments ranked above the median and nine ranked below the median for representative teachers colleges. The department of Physics, Chemistry, and All Grades (B) headed the list, while Arts, Primary, Physical Education, and Lower Grades (A) are at the bottom of the list. It is encouraging to find the All Grades group, both Curriculums A and B, above the national median. The median for the entire group coincides with the median for 5,862 scores from 26 teachers colleges. Even today, the materials taught in the elementary schools consist to a large degree of what is commonly known as the fundamental processes.

[3] *An Analysis of the Performance of College Freshmen on Arithmetic,* (Western Illinois State Teachers College, Macomb), Vol. XIX, No. 2, Sept., 1939.

CHART III

RANGE, MEDIAN, AND FIRST AND THIRD QUARTILE POINTS (BASED ON PERCENTILE RATINGS) FOR THE STUDENTS BY DEPARTMENTS AND CURRICULUMS ON THE TEACHERS COLLEGE PERSONNEL ASSOCIATION ELEMENTARY EXAMINATION, WESTERN ILLINOIS STATE TEACHERS COLLEGE, 1938-1939

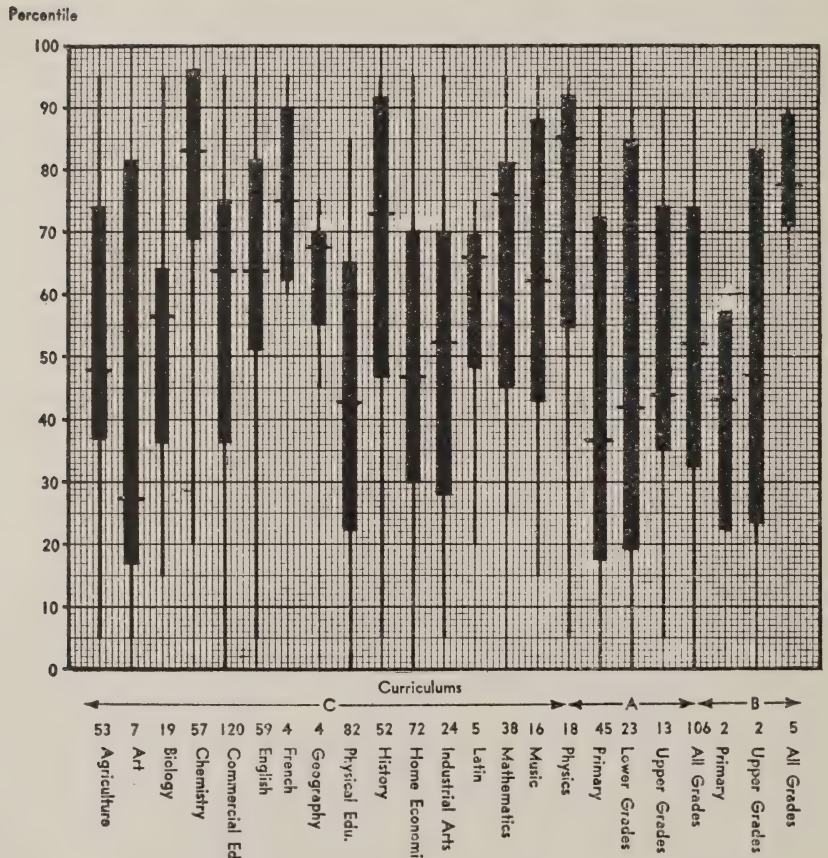


TABLE I

RELATIVE POSITIONS OF THE SEVERAL MAJOR GROUPS ON THE PSYCHOLOGICAL, ENGLISH, AND ELEMENTARY EXAMINATIONS

Rank	Psychological	English	Elementary
1	French	French	Physics
2	Chemistry	English	Chemistry
3	English	All Grades (B)	All Grades (B)
4	Upper Grades (A)*	Latin	Mathematics
5	Physics		French
6	Primary (B)		History
7	Mathematics	Music, Physics, and Chemistry	Geography
8	Music	Upper Grades (B)	Latin
9		Commercial Education	Commercial Education and English
10	Commercial Education,† Latin and Upper Grades (B)	All Grades (A)	
11		Lower Grades (A)	Music
12	History		
13	Geography	Primary (B), Mathematics and History	Industrial Arts, Biology and All Grades (B)
14	All Grades (A)		
15	Lower Grades (A)	Primary (A)	Agriculture
16	All Grades (B)	Home Economics	Home Economics and Upper Grades (B)
17		Upper Grades (B)	
18	Biology and Primary (A)‡		Upper Grades (A)
		Art and Geography	
19	Home Economics		Primary (B)
20	Agriculture	Biology	
21			Lower Grades (A) and Physical Education
	Art and Industrial Arts	Agriculture and Physical Education	
22			Primary (A)
23	Physical Education	Industrial Arts	Art

* Curriculum A.

† These three groups attained the same median score, therefore, each is given a rank of 10.

‡ These two groups attained the same median score, therefore, each ranks as 17½ which is shown by placing them midway between 17 and 18. Like cases in the other two columns are treated in a similar manner.

How do the Several Departments Rank in Regard to Intelligence, Mastery of English, and Comprehension of the Elementary Fields of Knowledge?

Table I shows the relative position of each major group on each of three examinations—the Psychological examination, the English examination, and the Elementary examination. On the Psychological examination, it is seen that students majoring in French, Chemistry, and English rank first, second, and third respectively. Students majoring in Agriculture, Art and Industrial Arts, and Physical Education rank twentieth, twenty-first, and twenty-third, respectively.

On the English examination, the French, English and All Grade (Curriculum B) groups rank first, second, and third, while Biology, Agriculture and Physical Education, and Industrial Arts occupy the three lowest positions.

On the Elementary examination, the first three positions are occupied by those majoring in Physics, Chemistry, and All Grade (Curriculum B). The three groups lowest in rank are Lower Grade (Curriculum A) and Physical Education, Primary (Curriculum A), and Art.

SCHOLASTIC RATING OF WESTERN STUDENTS

How do the Several Classes, Departments, and Curriculum Groups Compare in Regard to Scholastic Achievement?

So far this study has dealt with an analysis and interpretation of the results of the scores made on the Freshman Examinations by persons comprising the student body of the Western Illinois State Teachers College for the academic year 1938-1939. It will be the purpose of this section to analyze the scholastic records for each class for the total group, for each curriculum, and for the major groups of Curriculum C. Since only about one-fourth of the student body is enrolled in Curriculums A and B, it seems that there could be little significance in an analysis of the subdivisions of these two groups. The records used in this section consist of the school marks earned by the students in all subjects.

Table II shows the distribution of average honor points for each class—Freshman, Sophomore, Junior, and Senior—and for the entire student body. Attention should be called to the fact that honor points are computed in the following manner: 3 honor points for A; 2 for B; 1 for a C; 0 for D; and 0 for F.

Measures of central tendency, other point measures, measures of variability and reliability have been computed for the several groups.

An analysis of Table II shows that in regard to the mean, the median and the first and third quartile points there is a gradual increase from the freshman to the senior years. For example, the honor point average

TABLE II

DISTRIBUTIONS OF AVERAGE HONOR POINTS BY CLASSES AND FOR THE ENTIRE COLLEGE, WESTERN ILLINOIS STATE TEACHERS COLLEGE, 1938-1939

Honor-Point Average	Freshmen	Sophomores	Juniors	Seniors	Entire College
3.00	0	1	0	1	2
2.75	5	4	1	2	12
2.50	8	4	5	9	26
2.25	16	14	16	14	60
2.00	29	25	18	12	84
1.75	36	38	29	17	120
1.50	67	49	17	25	158
1.25	64	47	26	10	147
1.00	71	46	5	6	128
.75	38	13	5	5	61
.50	35	9	5	1	50
.25	15	3	1	0	19
.00	10	1	1	0	12
Total.....	394	254	129	102	879
Mean	1.37	1.54	1.73	1.86	
Median	1.28	1.54	1.79	1.81	
Q_1	1.00	1.20	1.36	1.54	
Q_3	1.80	1.90	2.14	2.26	
S. D.	0.582	0.506	0.556	0.513	
Sigma of the mean	0.029	0.032	0.049	0.051	
Diff. of the Mean		0.17	0.36	0.48	
Sigma Diff. of the mean		0.043	0.057	0.060	
Critical Ratio ...		4.0	6.3	8.0	
Chances in 100..		99.99683	99.99997	99.99997	

for the Freshman class was found to be 1.37; for Sophomores, 1.54; for the Juniors, 1.73; and for the Seniors, 1.86. The Freshman class was used as a basis for making comparisons. The difference between the average honor points of the Freshmen and Sophomores was found to be 0.17 in favor of the latter; between the Freshmen and Juniors, it was 0.36 in favor of the Juniors; and between the Freshmen and Seniors, it was 0.48 in favor of the Seniors. While these differences seem rather small, they are however, statistically significant. This significance is shown by the large critical ratios of 4.0, 6.3, and 8.0. When interpreted in terms of probability these critical ratios show that the chances are

more than 99 in 100 that the Sophomores, Juniors, and Seniors are scholastically superior to the Freshmen.

By comparing the means in Table II it is seen that the difference between the honor-point average of the Juniors and Sophomores is 0.19 in favor of the Juniors; the difference between the Seniors and Juniors is 0.13 in favor of the Seniors. Computations similar to those in Table II show that the critical ratios are respectively 3.3 and 1.8. In the case of the Juniors and Sophomores the chances are 99.95 in 100 in favor of the Juniors, while the chances are 96.41 in 100 that the Seniors have a higher average than the Juniors.

A further analysis of Curriculum C was made by grouping the students according to their major fields of study.

Table III shows the divisions of major subjects in this curriculum. For each division is shown the number of students electing that major, the mean or honor-point average, the median and first and third quartile points, the standard deviation, the standard error of the mean, the difference between the mean in mathematics and each of the other groups, the standard error of the difference, the critical ratio, and the chances in 100 that the difference is statistically significant.

In order to make a comparison between the honor point averages of the several groups it was necessary to designate one group as a criterion. The mathematics group was arbitrarily chosen for this purpose. The fact that this group contains a large number of students and has a high honor-point rating seems to justify this selection, however, any other group might just as well have been chosen.

Average honor points were computed for a total of 652 students who were enrolled in Curriculum C. The entire enrollment consisted of 879 students. Seventy-four and two tenths per cent or approximately three-fourths of the entire student body was enrolled in this curriculum.

The number of students in the several departments ranged in number from 4 each in both Geography and French to 130 in Commercial Education. The median for all departments was 25 and the average was 38 students.

The average honor points ranged from 1.11 for the Men's Physical Education group to 1.88 for the French majors. The median average honor point was 1.63. The first quartile points ranged from 0.74 for the Men's Physical Education to 1.75 for the French majors. The third quartile points ranged from 1.41 for the Men's Physical Education group to 2.38 for the Physics and Latin groups.

The standard deviation, the most reliable measure of variability, was computed for the distribution of honor points for each group. The Women's Physical Education group was found to be the least variable, while the greatest variability was found in the Latin group.

TABLE III

A COMPARISON OF HONOR POINT AVERAGES OF THE MAJOR GROUPS OF CURRICULUM C

	N	Honor Point Mean	Honor Point Median	First Quartile Point	Third Quartile Point	Standard Deviation	Standard Error of Mean	Diff.	Standard Error of Diff.	Critical Ratio	Chances in 100
French	4	1.88	1.88	1.75	2.00	.177	.088	.02	1.14	.18	57.14
Mathematics	39	1.86	1.80	1.31	2.03	.456	.073	Criterion			
Chemistry	54	1.73	1.66	1.36	2.17	.537	.073	.13	.103	1.26	89.62
English	61	1.72	1.67	1.29	1.75	.569	.073	.14	.103	1.36	91.31
Physics	20	1.69	1.63	1.15	2.38	.649	.145	.17	.162	1.05	85.31
Music	15	1.68	1.71	1.34	1.66	.389	.101	.18	.125	1.44	92.51
Latin	6	1.67	1.63	.94	2.38	.668	.274	.19	.283	.67	74.86
Art	8	1.66	1.75	1.25	2.00	.579	.205	.20	.218	.92	82.12
Biology	19	1.63	1.71	1.17	1.96	.568	.130	.23	.149	1.54	93.82
Geography	4	1.63	1.63	1.50	1.75	.177	.088	.23	.114	2.02	97.83
History	56	1.59	1.59	1.28	1.89	.503	.067	.27	.099	2.73	99.68
Physical Edu. (Women)	17	1.54	1.58	1.14	1.94	.536	.013	.32	.074	4.32	More than 99.99683
Home Economics	71	1.49	1.45	1.20	1.80	.501	.050	.37	.075	4.93	More than 99.99966
Commercial Education	130	1.44	1.51	1.19	2.02	.579	.051	.42	.089	4.72	More than 99.99966
Industrial Arts	25	1.38	1.35	1.06	1.67	.529	.106	.48	.129	3.72	More than 99.98922
Agriculture	59	1.35	1.39	.96	1.70	.494	.064	.51	.097	5.26	More than 99.99997
Physical Edu. (Men)	64	1.11	1.12	.74	1.41	.479	.059	.75	.094	7.98	More than 99.99997
Total	652										

The critical ratio was computed for each group. These ratios ranged from 0.18 for the French majors to 7.98 for the Men's Physical Education group. It is agreed among statisticians that the critical ratio must be 3 or more in order to be significant. The departments for which the critical ratios are greater than 3 are Physical Education for Women, Home Economics, Commercial Education, Industrial Arts, Agriculture, and Physical Education for Men, while the critical ratio for the History group is a little less than 3 (2.73). It is seen that in these seven groups the chances are more than 99 in 100 that the criterion group (mathematics) is scholastically superior when judged by honor point ratings based on grades. There are four groups—Music, English, Biology, and Geography—for which the critical ratios are interesting because the chances are more than 90 in 100 that there is a true difference in favor of the criterion group.

These comparisons assume additional significance when studied in connection with the performance made by these groups on the Classification Examinations. For this purpose it will be necessary to use the medians as the basis of comparison instead of the mean for the median is the only measure of central tendency available for the Classification Examinations. It should be noticed from Table III, page 17, that there is a very close agreement between these two measures.

If Table III is compared with Charts I, II, and III, pages 7, 10 and 12 and with Table I, page 13, it is seen that there is a marked tendency for groups that rank high or low in one place to occupy a similar position in the others. This raises a question on the amount of correlation shown by these various measures of achievement. The reader is reminded that the value of a correlation based on a small number of cases is questionable. The method of computing the coefficient does not materially affect its reliability under such circumstances, and the correlations by ranks are as effective as the product-moment method. In order, therefore, to crystalize the comparisons between the performance on the Entrance Examinations and achievement as shown by honor-point medians the rank correlation coefficients were computed for the major groups in Curriculum C. The correlations by the rank method are as follows:

(1) between median scores on Psychological Examination and the median honor-point rating $rho = .59 \pm .115$,

(2) between median scores on English Examination and the median honor-point rating $rho = .55 \pm .123$,

(3) between the Elementary Examination and the median honor-point rating $rho = .38 \pm .151$.

While these coefficients are not large and are acknowledged to be somewhat unreliable, there is sufficient evidence to warrant the statement that there is a tendency for those who major in, say, French, Chemistry, or Mathematics to rank high on the Classification Examinations and on

school marks. Also there is a tendency for those who major in, say, Physical Education, Industrial Arts, or Agriculture, to rank low on the same measures. It is to be noted that a tendency for a relationship has been pointed out and that no claim has been made for the degree of this relationship.

In Table IV the analysis is continued by curriculums. In Curriculum A are those students preparing to teach in the elementary schools. Curriculum B is designed to prepare students to serve as principals and superintendents of the elementary schools, while Curriculum C comprises

TABLE IV

DISTRIBUTION OF AVERAGE HONOR POINTS BY CURRICULUMS FOR THE ENTIRE COLLEGE, WESTERN ILLINOIS STATE TEACHERS COLLEGE, 1938-1939

Honor-Point Average	Curriculum A	Curriculum B	Curriculum C
3.00	0	0	2
2.75	1	1	10
2.50	5	1	20
2.25	8	3	49
2.00	30	0	54
1.75	33	4	83
1.50	32	3	123
1.25	33	1	113
1.00	38	2	88
.75	10	0	51
.50	8	0	42
.25	7	1	11
.00	6	0	6
Total	211	16	652
Mean	1.51	1.81	1.54
Median	1.53	1.81	1.51
Q_1	1.14	1.50	1.15
Q_3	1.93	2.33	1.92
S. D.	0.565	0.615	0.570
Sigma of the mean	0.039	0.154	0.022
Diff. of the mean	0.03	0.27	
Sigma diff. of the mean	0.045	0.156	
Critical Ratio	0.67	1.73	
Chances in 100	74.86 In favor Curriculum C over Curriculum A	95.82 In favor Curriculum B over Curriculum C	

the students preparing for high school teaching. This table shows the number enrolled in each curriculum, the mean or average honor-point rating, the median, the first and third quartile points, the standard deviation, and the standard error of the mean, the difference between the mean in Curriculum C and each of the other groups, the standard error of the difference, the critical ratio, and the chances in 100 that the difference is statistically significant.

The outstanding difference between the groups is in the distribution of the student population over the various curriculums. It is seen that 74 per cent of the students are enrolled in Curriculum C. On page 22 of this study it is pointed out that, over a five year period (1935-1939), 77 per cent of Western graduates were from Curriculum C. According to the records in the Office of the Bureau of Appointments, there were 151 students graduated from the college in 1939. Of this number 109 (72 per cent) were graduated from Curriculum C (high school preparation) and 42 (28 per cent) were graduated from Curriculums A and B (elementary education). Of these graduates 134 (75.5 per cent) were placed in teaching positions. Thirty-four per cent of those placed secured high school positions, while 66 per cent secured positions in the elementary schools. The 42 graduates who prepared for elementary teaching were placed in the elementary schools; 92 of the 109 preparing for high school teaching secured positions, but only 47 of them were placed in high school positions, while 45 who prepared for high school work secured positions in elementary work.

These facts on placement and the large number of pupils in Curriculum C as shown in Table IV would point toward a need for a guidance program which would assist students in selecting a program that will more nearly prepare them for the type of position they will probably have upon graduation, or probably some adjustment in the curriculum might create a greater demand for Curriculum C graduates.

A study of the means, medians, and quartile points in Table IV seem to indicate very little difference between the scholastic achievement of the three groups. Curriculum B has the highest mean rating, Curriculum C second highest, and Curriculum A the lowest, however, these differences are not statistically significant as shown by a critical ratio of .67 between Curriculum C and A, and a critical ratio of 1.73 between Curriculums B and C. On the basis of probability there are 74.86 chances in 100 that there is a difference between Curriculum B and C in favor of Curriculum B.

SCHOLASTIC STANDING OF WESTERN GRADUATES

What is the Scholastic Standing of Western Graduates and How do the Several Departments of the College Compare in Scholarship?

This section of the study endeavors to make a comparison of the scholastic ratings of the graduates at Western Illinois State Teachers College over the five year period from 1935 to 1939. The records of the 630 Bachelor of Education graduates were obtained from the Registrar's Office, divided into the twenty-three major groups, and the honor-point average (based on all marks earned in college) computed for each group.

Table V shows these major divisions. For each division is shown the number of graduates, the honor-point average, the standard deviation, the standard error of the mean, the difference between the honor-point average in mathematics and each of the other groups, the standard error of the difference, the critical ratio, and the chances in a hundred that the difference is statistically significant.

According to the grading system at Western each quarter hour is assigned 3 honor points for an A, 2 for a B, 1 for a C, and none for D or F. The honor-point average is, therefore, obtained by dividing the total number of honor points by the total number of quarter hours. In order to have a basis for comparison the record of one major group, mathematics, was chosen as a criterion. Many authorities on statistical methods state that in order for a difference between the means of two groups to be significant there should be a critical ratio of not less than 3 when calculated on the standard error. This means that the odds are approximately 740 to 1 that the group with the higher mean is really superior to the other. Table V gives the critical ratio and the chances in a hundred that there is a true difference between the mean of each group and the mean of the mathematics group. It is seen that four groups have a higher honor-point average than mathematics. These groups are: those majoring in Upper Grades, Curriculum A; Primary Grades, Curriculum B; Latin, and French. According to the criterion of a critical ratio of 3 for a significant difference none of the four can be said to be scholastically superior to the mathematics group.

The group majoring in Curriculum A, Upper Grades, consisted of 18 graduates over the five year period. The honor-point average was 2.109, a little better than a grade of B, the standard deviation was .342, standard error of the mean .081. The difference between the honor-point average of this group and that of mathematics is .222. The standard error of the difference is .102, hence the critical ratio is 2.18 (.222 ÷ .102). While this ratio is less than 3 it is observed that the chances are 98.54 in 100 that there is a difference between the two groups in favor of the Upper Grades (A).

TABLE V

A COMPARISON OF HONOR-POINT AVERAGES OF BACCALAUREATE GRADUATES, 1935-1939

Major Groups	N	Honor Point Average	Standard Deviation	Standard Error of Mean	Diff.	Standard Error of Diff.	Critical Ratio	Chances in 100
Upper Grades (A)*	18	2.109	.342	.081	.222	.102	2.18	98.54
Primary (B)	11	2.038	.454	.137	.151	.155	.97	80.78
Latin	13	2.034	.366	.102	.147	.119	1.24	89.25
French	8	1.969	.370	.131	.082	.145	.58	71.90
Mathematics	51	1.887	.446	.063		Criterion		
English	48	1.875	.432	.061	.012	.087	.13	55.17
Art	9	1.860	.229	.076	.027	.098	.28	61.03
Upper Grades (B)	25	1.853	.417	.083	.034	.104	.33	62.93
All Grades (B)	20	1.818	.416	.093	.069	.112	.62	73.24
Chemistry	43	1.800	.490	.075	.087	.097	.90	81.59
Geography	3	1.762	.386	.222	.125	.231	.54	70.54
Agriculture	8	1.756	.262	.093	.131	.121	1.08	85.99
Commercial Edu.	60	1.716	.413	.055	.171	.083	2.06	98.03
History	65	1.712	.445	.055	.175	.083	2.11	98.26
Biology	23	1.703	.341	.071	.184	.095	1.94	97.38
Physics	17	1.699	.414	.100	.188	.118	1.59	94.41
Home Economics	31	1.689	.393	.071	.198	.094	2.11	98.26
Primary (A)	29	1.664	.426	.079	.223	.110	2.03	97.88
Music	18	1.651	.378	.089	.236	.109	2.17	98.50
Lower Grades (A)	25	1.632	.385	.077	.255	.099	2.57	99.49
All Grades (A)	19	1.626	.309	.071	.261	.095	2.75	99.70
Industrial Arts	26	1.512	.311	.047	.375	.078	4.68	More than 99.99987
Physical Edu.	60	1.344	.337	.044	.543	.076	7.13	More than 99.99997

* The letter indicates the curriculum. All names not followed by a letter are in curriculum C, those preparing for high school teaching. Those in curriculum A are preparing to teach in elementary grades. Those in curriculum B are preparing for administrative work in grades.

A further inspection of Table V shows that there are only two major groups, Physical Education and Industrial Arts, over which the mathematics group has an undisputed superior scholastic rating. However, there are eight other groups for which the chances are more than 97 in 100 that there is a difference in favor of the mathematics majors. These groups are: Commercial Education, History, Biology, Home Economics, Primary (A), Music, Lower Grades (A), and All Grades (A).

The relative ranks of these major groups show a striking agreement with the ranks of major groups as reported in a study at Ohio University, Athens, Ohio.[4] In the Ohio study the Latin group was the only one found to be significantly superior to the mathematics group, while the groups in Agriculture, Physical Education, Industrial Arts, Commerce, Economics, Home Economics, Engineering and Physics, Sociology, and History were significantly lower in scholarship than the group in mathematics.

It may be of some significance to note that in Chart 1, page 7, there is only one of these ten major groups just mentioned in Table V that has a median score on the Psychological Examination that exceeds the 50 percentile mark. This one is the Music group whose median score is at the 51 percentile. From the available evidence it is observed that certain major groups, such as, Physical Education, Industrial Arts, Commerce, Agriculture, Home Economics, and Social Sciences have a tendency to occupy positions low in rank, while the groups in Languages, Mathematics, and Physical Sciences often attain the positions of higher scholastic standing. It was pointed out on page 18 of this study that there is a tendency for those groups that rank high or low in one test of achievement to occupy a similar position in other tests. These comparisons of the graduates in major groups by honor-point averages seem to verify that statement and serve as an indication of the reliability of the various tests of achievement.

In the study of Table V and subsequent observations, the reader is reminded that all conclusions are subject to the assumptions of all statistical analysis. It is of significance to remember that the number in each group is small and consequently cannot represent an ideal sampling. The purpose of the investigation is to give a picture of the conditions as found, rather than to formulate dogmatic conclusions or establish a criterion for predictions.

It is again revealed that about three-fourths of the students elect the program offered in Curriculum C. Seventy-seven per cent of those graduating during the five year period under discussion did their work in this curriculum. The departments having the greatest number of graduates rank in the following order: History, Physical Education, Commercial Education, Mathematics, English, Chemistry, Home Economics, Industrial Arts, Biology, Music, Physics, Latin, Art, French, Agriculture, and Geography.

[4] Morton, R. L. and Miller, L. H., "A Comparative Study of the Scholarship Records of Students Who Major in Mathematics," *School Science and Mathematics*, XXXVI (December, 1936), 965-967.

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"This Institution is a Member of the American Association of Teachers Colleges, Accredited since February 25, 1928."

This Teachers College was also accredited by the North Central Association of Colleges and College Standards, March 16, 1928, and has been accredited annually since that date.

WESTERN ILLINOIS STATE TEACHERS COLLEGE
Quarterly

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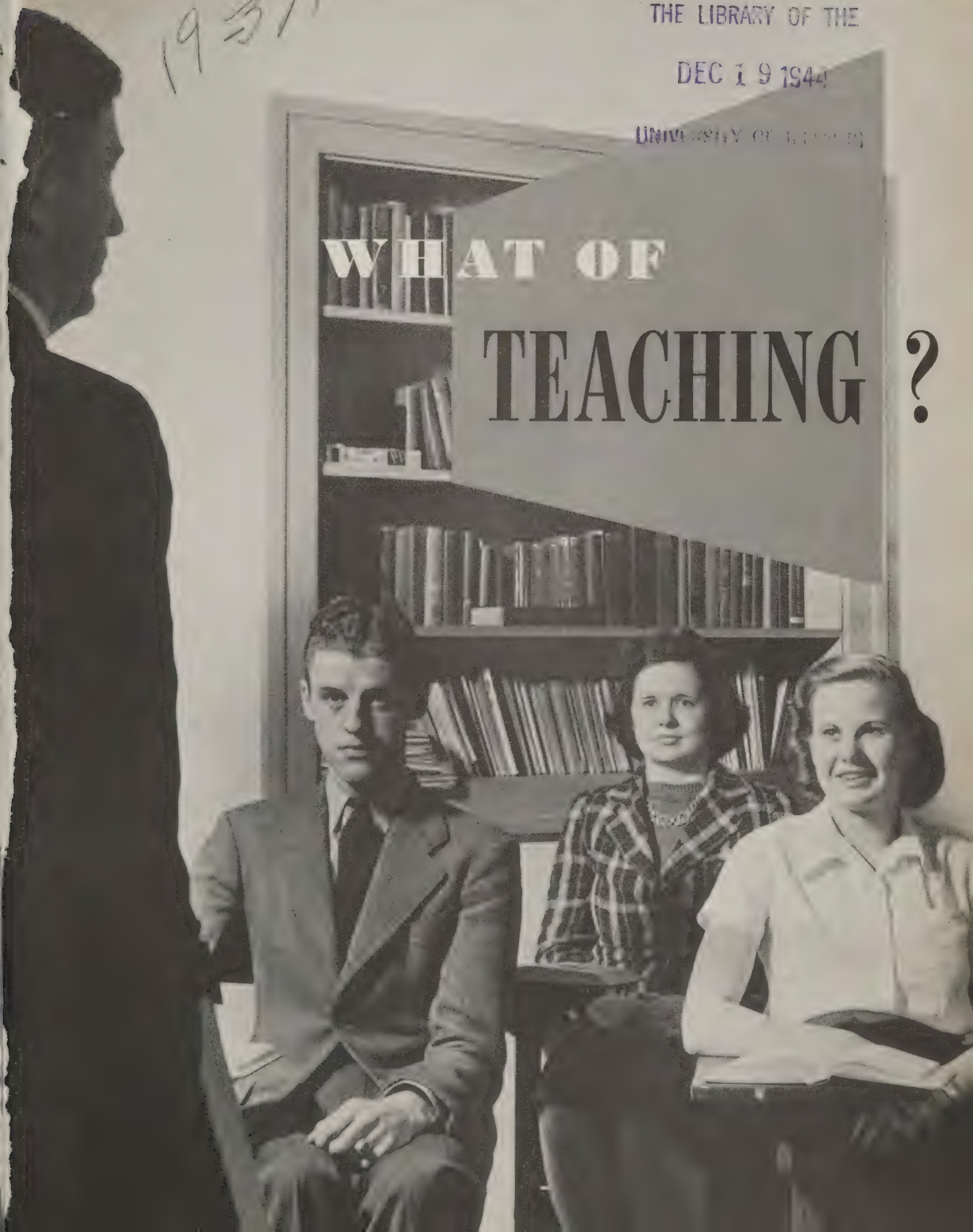
WHAT OF TEACHING?



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State of Illinois, Henry Horner, Governor

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Printed by authority of the State of Illinois

WHAT OF TEACHING?

YOU—like more than a million other high school graduates in the United States this year—are face to face with a decision: "*What shall I adopt as the work of my lifetime?*"

It would be hard to lay too much stress upon the importance of this decision. If you should make a wrong choice of occupation, you could never hope to attain great success or contentment in your work. Even though you discovered your mistake eventually, you would have wasted time—precious time that might have carried you far in the right direction. An immediate choice of occupation is important in another way: if you decide to enter a certain field, you will wish not merely to go to college, but to attend the type of college which will prepare you for the specific work you plan to do.

So it is wise to recognize the seriousness of the decision you are facing, and to take the time and trouble to make it correctly.

YOU ARE ONE IN EIGHT

If your mind is not yet made up, we urge that you consider teaching, along with other lines of work. You are fortunate in being able to do so. Only one adult of every eight in this country reaches the milestone which your high school diploma tells us you have attained and many professions are now open to you that otherwise would have been closed.

What of teaching? Let us first look at a few interesting facts. About $2,000,000,000 is spent each year in the United States on public education. We have more than 1,000,000 teachers—teaching is by far the largest of the professions. Our schools are near to the hearts of the American people, and have been since our republic was founded. The Northwest Ordinance of 1787 provided for schools because they were considered necessary to good government and "the happiness of man-

kind." Washington thought knowledge in every country "the surest basis of happiness." Jefferson believed in education for all at public expense; and, when writing the epitaph for his own tombstone, he reminded us that he was "author of the Declaration of American Independence, of the Statute of Virginia for Religious Freedom, and *Father of the University of Virginia.*"

Horace Mann—who wanted to go to college so badly that he learned both Latin and Greek in six months—is often credited with being the father of American public school education. It was he who convinced the citizens of Massachusetts that they could not have good schools without comfortable buildings, statewide supervision, and adequately trained teachers. It was Mann who said to his Antioch College students, "Be ashamed to die until you have won some victory for humanity."

GREAT NAMES IN HISTORY

It would be possible to quote almost indefinitely from great Americans who believed that education and democracy must necessarily go hand in hand. It is a temptation, in fact, to go beyond America, for everyone knows that many of the illustrious names in history are the names of great teachers. The teachers of the world have done more, probably, for the welfare of the people and the advancement of civilization than all the generals and statesmen who ever lived.

Let us, however, get back to your immediate problem. Very likely you have in mind certain questions like these—"What is teaching like? Am I the sort of person who might be a successful teacher? What does the teaching profession offer me?

Take the first question. It is difficult to tell you what all teaching is like for there are many different types of teaching positions. The professor in the college classroom, the science instructor in the high school laboratory, the physical education director on the playground, the band leader on stage or athletic field—all are teachers.

To give you information about the different types of educational work, including some with which you may not be familiar, we have provided most of the pages which follow. You already know something about teaching from the pupil point of view, for you have spent years in classrooms. You can learn more about the kinds of teaching open to you through talking with some of the teachers you know. To get still more information, you will do well to read some of the books and monographs

listed on Page 33. In order to be entirely fair to yourself, do not drop this subject until you have explored it thoroughly.

Then a word as to the requirements for success in teaching. You can find out from your principal anything you need to know about examinations, certificates, and other legal requirements, so let us turn to some of the personal qualities which make good teachers. A survey made by F. W. Hart among 10,000 high school students a few years ago indicates that those teachers rated highest who were *helpful, always willing to explain puzzling problems.* Cheerfulness, humanness, companionability were also considered highly important. Among other qualities which deserve mention are personality, good health, good appearance, fondness for the young, and an interest in the subject taught.

Now let us consider what the teaching profession offers you. William Lyon Phelps, one of this country's greatest teachers, has said, "The excitement of teaching comes from the fact that one is teaching a subject one loves to individuals who are worth more than all the money in the world."

RESPECTABLE . . . STABLE INCOME

In dollars and cents, teaching offers a moderate but respectable and comparatively stable income. Earnings vary according to the wealth of communities, types of positions, and the experience, educational qualifications, and abilities of different teachers.

The national average of all public school teachers' salaries is between $1,300 and $1,400 annually. Teachers in rural areas usually receive considerably less than $1,000. The average salary for teachers in urban areas is approximately $1,900. The highest public school salaries are earned by city superintendents.

Although many college instructors earn much less than $3,000 a year, the average earnings for this group is over that figure. A few college presidents are paid more than $10,000 a year, but, of course, other college administrators earn much less.

You will find, we believe, that the earnings of teachers are fairly comparable with those in other fields. Favorable working conditions, attractive vacations, pleasant associations, *and* opportunities for further self-improvement are among additional rewards.

Mention has already been made of the relatively stable employment conditions surrounding the teaching profession. Statistics show that teachers suffered less unemployment during the depression years than other

professional groups. In more than two-thirds of the states, moreover, teachers are protected by tenure laws. Pension laws providing well-regulated retirement plans are becoming more general. The security enjoyed by members of *this* profession is decidedly worth considering.

An important change has come about in the teaching field during recent years. Prior to the Great Depression the educational world suffered through the fact that industry, commerce, and other professions offered young people opportunities so inviting that the schools were unable to compete on a strictly financial basis. Since 1929 the business world has provided fewer openings of this nature, and education has been able to attract more young people who are outstanding in scholarship, abilities, and personality. This is gratifying, because education is deserving of the best. Coming years should see steadily rising standards and a new generation of great teachers.

BY ALL MEANS, ENTHUSIASM!

When you have considered every angle of teaching and are determined to enter this eminent profession, be sure that your decision has in it no trace of half-heartedness. A reluctant and discontented member of the profession, no matter how superior his scholarship or his abilities, is no asset to education, but a liability. If you choose to become a teacher, resolve to do your particular work better than it has ever yet been done. In that spirit alone can you be fair to the public which will pay your salary, to the precious human material in your charge, and, in the end to yourself.

One of the most enthusiastic and brilliant men ever on the faculty of Harvard University once said something which every young teacher should take to heart. This Harvard instructor was Professor Palmer, who taught because teaching was to him an everlasting thrill, a delight, and an adventure. He said—"*Harvard College pays me for doing what I would gladly pay it for allowing me to do.*" Those are the words of a mighty spirit and a wise gentleman.

You will find on the following pages pictures and text that will give you a better understanding of public education in Illinois and the types of work it involves. Alumni of the five Illinois State Teachers Colleges are the teachers pictured in these actual and typical classroom scenes. They represent the many fields of teaching, for which preparation is offered at all these institutions.

KINDERGARTEN

Through the doorway, the kindergarten teacher steps to welcome these children entering an unfamiliar world.

Not common in the small community, kindergartens and nursery schools are more often a part of the city system. Operated as private enterprises are also many pre-schools. Public concern for the education of the very young child is increasing.

Women who are especially interested in children between the ages of two and six are attracted to nursery schools and kindergartens as teachers. They spend many hours preparing for each day's activities although their small charges are in school for only short periods.

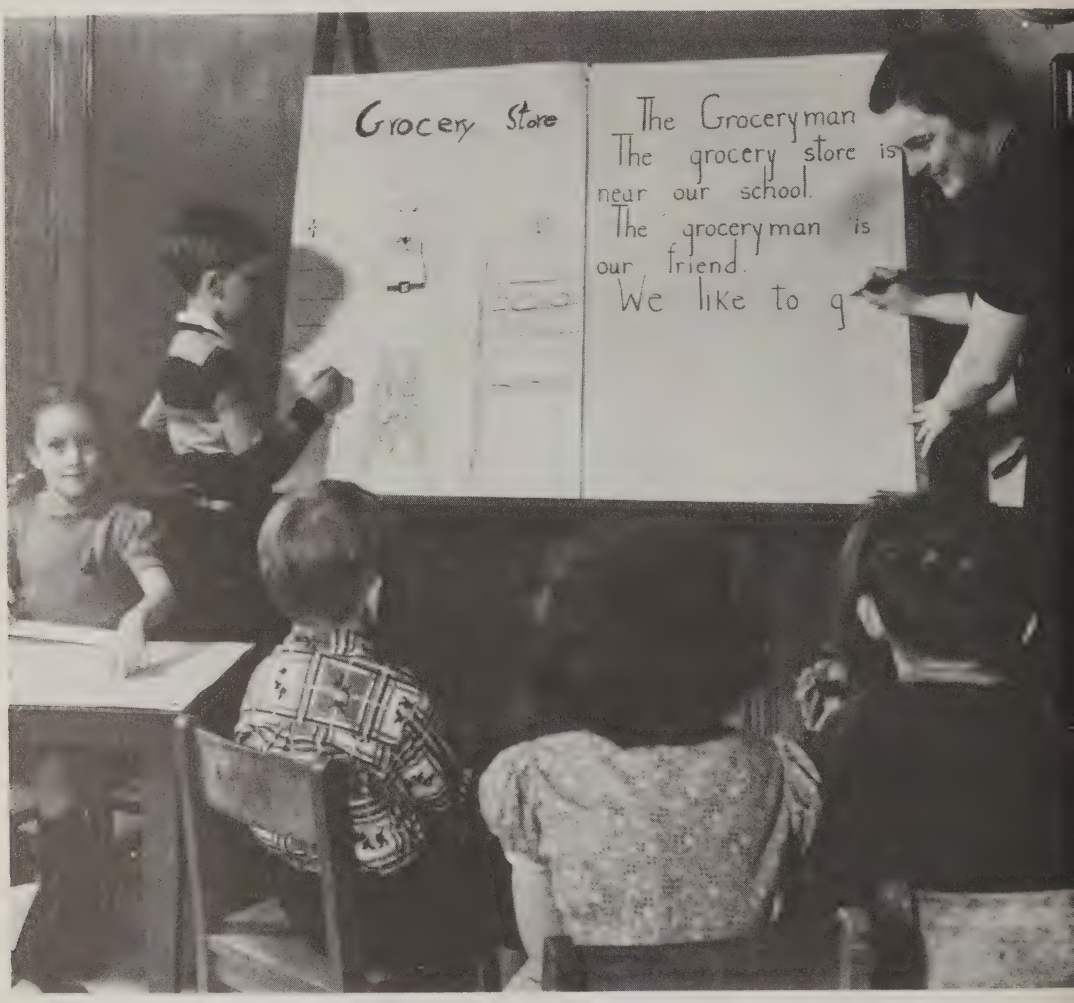
A happy, informal atmosphere has the kindergarten where children often eat and rest as well as talk, draw, and play together.

The teacher pictured is Miss Helen Eaton of the Lincoln School, Sterling, a graduate of the Northern Illinois State Teachers College, DeKalb.

PRIMARY

Growing through new experiences are children in the lower or primary grades. It may be a turtle, a flower, or a neighboring grocery store that they study. All lead to new discoveries, new interests, new words.

A creator is the primary teacher as she often prepares her own texts and materials to fit the needs of her pupils. Her task is not simple but requires thorough training as well as patience. Rewards in the form of more questions and warm smiles gladden her work. Explorers together are the children and teacher.



In the Central School, Evanston, Mrs. Hazel Weakly teaches and supervises work in the first and second grades. She is a graduate of the Eastern Illinois State Teachers College, Charleston.

INTERMEDIATE

The teacher in the intermediate grades helps children acquire basic skills and gives them wider relationships. Into the classroom she brings such tools as the radio for teaching a unit in the social studies. Her wide choice of materials enhances interest on the part of her pupils while a sympathetic understanding prevents the self-consciousness often apparent in groups at this age.

Committee responsibilities, individual assignments, special projects furnish the bases as training for citizenship begins. Relationships in the home are stressed. An interest in healthful habits develops. Strength of character and breadth of experience are needed by the teacher who guides these boys and girls.

A graduate of the Northern Illinois State Teachers College, DeKalb, Miss Catherine Lange teaches fourth grade subjects in the Church School, Rockford.

UPPER GRADES

A counselor to parents as well as to boys and girls is the upper grade teacher as he reviews pupils' achievement records in the elementary school. As principal of all grades or playground director the teacher in the upper grades often serves.

Widely different types of school organizations demand different teacher qualifications. Some schools have strictly one-room programs, others departmental work. While men with administrative ability are frequently sought as upper grade teachers, many positions are open to women. All teachers in the field need an appreciative understanding of youth.

"Shall I go on to high school or are my school days over?" Upper grade teachers need vision as they face this problem with their boys and girls.

Umpiring the baseball game and conferring with parents is William Grove, principal of the Blaine School, Batavia. He is an alumnus of the Northern Illinois State Teachers College, DeKalb.

RURAL

In Illinois are approximately 10,000 one-teacher rural schools. An interest in rural life and an understanding of rural problems are essential to the teacher who plans alone the program of a one-teacher school.

She needs the motherliness of the primary teacher, the inspiring confidence of the intermediate grade teacher, and the counseling powers of the upper grade teacher for in her room may be children of all ages in all grades, depending upon the school population of the community.

A wide field for service, rural school teaching offers wholesome experience to the beginner. No department of the public school system is in greater need of a well-trained personnel.

Pictured is the Tripp School, Jonesboro, where Miss Cleta Grear, graduate of the Southern Illinois State Normal University, Carbondale, teaches. The noon-hour activities are typical.

JUNIOR HIGH

Upon entering the junior high school or the upper grades of a traditional school, boys and girls usually first have men as teachers. Although not common, junior high schools are found in some Illinois cities. Generally housed in special buildings, they offer wide choices in curricula and an organized plan for high school preparation.

Scout groups, hobby clubs, safety patrols are many. Physical education activities take definite form. Vocational courses are introduced.

Women and men teaching in the junior high school need special training for conducting extra-curricular activities as well as classroom work. Community leadership is their responsibility.

Arthur C. Forster of the Mayo School, Paris, was graduated from the Eastern Illinois State Teachers College, Charleston. A Boy Scout leader, he is in charge of guidance activities, physical education classes and also serves as principal.

HIGH SCHOOL PRINCIPAL

Counseling with students and school organizations as well as with teachers and parents is all included in the work of the high school principal.

A leader in the community, the principal understands the place of the school and interprets its program to the general public. At times a classroom teacher, he is also responsible for the school curricula and must consider the financing of the entire program as well as its functioning.

For the young man this field of administrative work holds rich opportunities.

Counseling with students (in the upper photograph) is Ray D. Brummett, principal of the Pana Township High School. He is a graduate of the Southern Illinois State Normal University, Carbondale. In the other photograph is S. B. Sullivan, graduate of Illinois State Normal University, Normal, who is principal of the West Frankfort Community High School and a past-president of the Illinois Education Association.

ENGLISH

In every high school of the state are one or more English instructors. Need for thorough training in English as a basis of good citizenship has long been recognized, and no subject is more widely taught.

An appreciation of literature, better writing, and better speaking are all products of the English class. The teacher's enthusiasm and example are most important.

Sponsorship of the school paper or yearbook is often included among duties of the English teacher where journalism is not offered as a separate course. Combined with English teaching is the direction of play productions and speech activities in the small high school. The library management, too, sometimes falls to the English staff. In the large high schools special work in remedial reading is being added.

Pictured is the newspaper staff of Potomac High School. Miss Helen Myers (right), co-sponsor of the school's paper, is an alumna of the Western Illinois State Teachers College, Macomb.

LATIN

Including Latin in their curricula are more than 800 Illinois high schools. Other foreign languages while offered in the larger schools are not usually taught in the small community.

Ingenuity is required of the foreign language teacher who makes another civilization live for his students. A thorough mastery of the language he teaches and an understanding of the peoples employing it are essential.

Charts, maps, pictures, supplementary texts, newspapers—all bring the world studied closer. A love of literature, skill, and patience are helpful to the one entering this teaching field.

The teacher is Earl Trobaugh, Latin instructor in the LaSalle-Peru Township High School. He is a graduate of the Southern Illinois State Normal University, Carbondale.

SOCIAL SCIENCE

Into the community, students of the social studies go to gain a better understanding of civic problems and contemporary life.

To the teacher of history, the political sciences, economics, and sociology comes an opportunity to understand and shape future governments. An appreciation of the importance of the social science field in the high school curriculum is growing as course instruction broadens. Practical, yet visionary, does the social studies teacher need to be.

Visiting this business house are pupils in the New Salem Community High School. Their social science instructor as well as principal is C. L. Mitchell, a graduate of the Western Illinois State Teachers College, Macomb.

SCIENCE

Through interest groups and club activities the high school science teacher gives boys and girls practical work. Field excursions supplement laboratory materials. On his toes must be the instructor, aware of new developments and their probable consequences.

In the small high school all classes in biological as well as general and the physical sciences may be offered by one teacher. In the larger school such work is often divided. Photography, safety, or arts and craft instruction is in some schools given by the science staff.

The pupils in these photographs are students in the Wood River-East Alton Community High School. Their instructor, H. A. Oetting, is an alumnus of Illinois State Normal University, Normal.

The class instructor is Winfred Guthrie, a graduate of the Western Illinois State Teachers College, Macomb. His pupils are in the LaHarpe High School.

MATHEMATICS

Bases for technical training and professional careers are high school mathematics courses. Directing the finances of the high school athletic board or making the family budget students study useful mathematics. Their graphs tell the story of business conditions or pupil progress.

Accurate, enthusiastic, and practical must the instructor be. To college students with good high school records who are interested in teaching, this field of specialization is attractive. Although teaching methods have changed, still taught in almost every Illinois high school are courses in mathematics. No substitute has been found for their essential principles.

GEOGRAPHY

The interpretation and collection of data pertaining to their own local market area serve students with a practical approach to high school geography. With half days in the field, studies are made of farm types, factories, and housing conditions. Materials gathered are interpreted in terms of the natural landscape, and inter-relationships become the center of interest.

Thus human ecology, the study of man's adjustment to his natural environment is emphasized. And high school geography is a study that enters into the student's daily life and one that he can continue after his school days are over.

The geography teacher must be a specialist, must see relations and develop them. In Illinois high schools, however, the instructor in geography is often called upon to teach subjects in related fields.

Photographed on a field trip were these students in Edwardsville High School. Their geography teacher who is assisting with the interpretation of data is P. H. Kinsel, an Eastern Illinois State Teachers College alumnus.

PHYSICAL EDUCATION—BOYS

The high school athletic director and coach wields a strong influence in the community. His manner of directing sports and games, as well as his attitude toward the physical well-being of his students helps to set the standard of the high school, center of the small community.

Types of sports handled by one coach vary according to the size and organization of the school. In some instances the physical education teacher also serves as coach; in other cases coaching is an additional assignment given to one offering instruction in an unrelated field.

The capable direction of physical education and athletic activities offers to men a test of character as well as skill. And executive ability in planning department programs and outlining schedules is essential.

Pictured in the dressing-room scene are members of the Dwight Township High School basketball squad. Their coach, John G. Pace, is an alumnus of Northern Illinois State Teachers College, DeKalb.

GIRLS' PHYSICAL EDUCATION

On the gymnasium floor or athletic field the high school girl develops an ability to relax in recreational activities and to cooperate with others. The self-reliance and poise obtained go with her through life. With the acquirement of definite skills comes an enjoyment of hobbies. Her whole-being radiates good health.

The opportunity of offering this enriched life to her students is that of the girls' physical education director. Hers is a full program. The woman who enjoys physical activity and fine human relationships finds both when she becomes a teacher of physical education.

The students are from the Bloomington High School. Their instructor, Miss Claudine Shepherd, who is assisting the archer, is an alumna of Illinois State Normal University, Normal.

SPEECH

Realizing the importance of correct and clear speech to a well-trained citizenship, additional Illinois high schools continue to introduce speech courses for credit.

To the instructor of such classes usually falls the task of directing debating, dramatics, and other extracurricular speech activities. And the enthusiastic teacher can render wide service by conducting forums, sponsoring a speaker's bureau, and developing a good speech-conscious public.

An ability to plan, suggest wisely, and secure the cooperation of his students is a success requirement in this field. With the finest examples in his own pronunciation and articulation as well as thorough training, the speech instructor proceeds confidently.

The debaters are those of Lincoln High School. Their coach is Robert G. Turner, the high school speech department head, who was graduated from Illinois State Normal University, Normal.

COMMERCE

Approximately 70 percent of the Illinois high schools now offer commercial work. Positions open in this field exceeded the number of qualified instructors available for many years. With requirements for teaching commercial studies reduced and more colleges introducing commerce instruction, however, indications are that a reversal of the past situation may be forthcoming.

The commerce teacher needs to have at least a moderate degree of expertness in the skill subjects, and must be aware of business conditions and their social implications. In the small high school such an instructor will probably teach all commercial courses. Since the larger schools often employ only experienced teachers, it is wisest for the high school graduate entering the field to prepare for teaching all phases of commercial work.

This typing class is in the Ashmore High School. Miss Grace G. Thompson, Eastern Illinois State Teachers College graduate, is the instructor pictured.

MUSIC

Public school music is a field of teaching for both men and women where the demand frequently exhausts the supply of available candidates.

Many are the extracurricular organizations directed by the music instructor who in some school systems does not have an opportunity for teaching theory or survey courses. Bands, orchestras, choirs, and choruses must be directed; and private instruction often given.

To the one who loves the music world, here is an opportunity to combine artistic tastes and expression with vocational choice. Through his organizations and wide community contacts, the music instructor has a chance to render much service.

The A Cappella Choir is that of the Anna-Jonesboro Community High School. Gerald Daniel, alumnus of the Southern Illinois State Normal University, Carbondale, is the director.

ART

The art teacher's work may be in the elementary grades, high school, or college. She needs to understand pupils of all ages and the phases of art most readily adapted to their creative desires. Murals, handicrafts, designs, and models take shape as she suggests procedures and inspires her pupils to work out their ideas.

Combining her interest in art with a joy in human relationships, the instructor finds an excellent avenue open for both self-expression and service.

Miss Marie Ringquist (left), a teacher in the McKinley School, Moline, is pictured with an art pupil. She is a graduate of the Western Illinois State Teachers College, Macomb.

AGRICULTURE

The vocational agriculture teacher is a community adviser as well as high school instructor. Sponsoring 4-H Clubs, Future Farmers of America, or teaching adult education classes, he helps to carry through the entire year's program of the rural community. In no field has a teacher wider influence or a better opportunity for service.

Agriculture instructors are among those employing widely the project method. Students under their direction may earn thousands of dollars each year.

Practical farm experience, excellent training, and an ability to work with others are requisites for success in teaching vocational agriculture. The field is one of the best there is open to young men who have these qualifications.

The Smith-Hughes agriculture instructor of students running the Babcock milk test, judging grain, and studying farm animals is Marvin J. Nicol of the Marengo High School, a graduate of Illinois State Normal University, Normal.

HOME ECONOMICS

From the cooking and sewing classes taught some years ago have emerged broad courses in homemaking now offered in approximately one-half of the high schools of the state. The Smith-Hughes Act that enables local schools to secure federal aid when introducing vocational programs was an incentive to their creation.

College placement bureaus have not been able to fill the calls for home economics teachers in the past few years. A rush on the part of high school graduates to enter this field of teaching has been evident, and the demand is rapidly lessening.

A personal adviser to her students, the home economics teacher often directs the management of a cafeteria or plans fashion shows in addition to teaching courses in foods, clothing, family relationships, or household finance.

In the Barrington High School cafeteria students of Miss Emma Grace Trepus receive practical lessons in meal preparing and planning. Miss Trepus is an alumna of the Northern Illinois State Teachers College, DeKalb.

INDUSTRIAL ARTS

Not only as a basis for further vocational training but as practical instruction for "worthy home membership" is the high school industrial arts course offered.

The cost of installing equipment and purchasing materials for class use has been partially responsible for limiting the number of high schools giving such work. With the wide interest in vocational education, the use of the economically equipped general shop, and the offering of training for all phases of home life, it is probable that the number will be increased.

An interest in industrial life as well as skill and thorough knowledge in his special fields is essential to the industrial arts instructor. In the well-equipped high school teaching assignments in his own field are sufficiently wide to eliminate usually the necessity of teaching in other fields.

The class shown in practical arts for freshmen girls is taught by W. B. Ashley of the Maine Township High School, DesPlaines. He is an alumnus of the Northern Illinois State Teachers College, DeKalb.

Pictured is Ross J. Nichol, superintendent of Pike County schools, as he visits a school under his supervision. Mr. Nichol was graduated from the Western Illinois State Teachers College, Macomb, and has his office in Pittsfield.

COUNTY SUPERINTENDENT

Elected for four-year terms in Illinois are the county superintendents of schools. Theirs are the positions linking local schools with the state department of public instruction.

From the superintendents' offices go school statistics to the state office. The county superintendent, it is, who certifies to the state department those high school graduates eligible for state teachers college scholarships, and he it is who secures for beginning teachers their certificates.

Supervisory duties also are given to the county superintendent. He visits regularly schools in his territory, helps to plan school curricula, and holds teachers' meetings.

Although much of his work is routine in nature, the county superintendent has an interesting position and a chance to be of service to a large community.

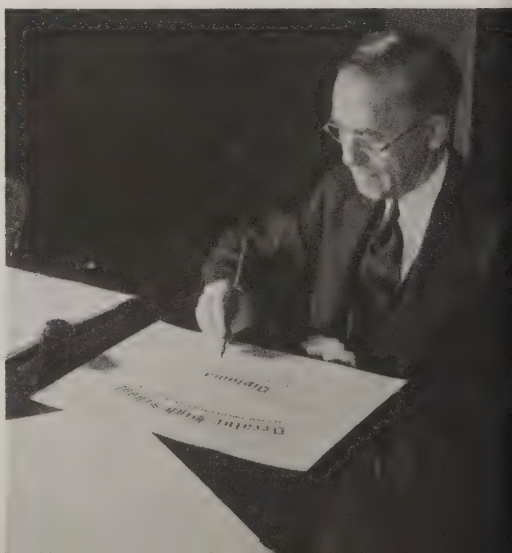
CITY SUPERINTENDENT

In a position of great trust is the city superintendent, ranking school official in public education. To him are turned the eyes of students, teachers, and parents. His realm may include as many as three or four hundred different elementary and secondary schools; in each, hundreds of people carrying out the program which he directs.

Such a position is acquired in most cases only after many years of teaching and experience in various types of administrative offices. It carries with it extensive civic responsibilities and an opportunity for leadership in state educational circles.

Executive positions of this and lesser types open to men furnish incentives to those considering entering the teaching field with ambition to rise to the top.

Conferring with teachers and signing diplomas in these photographs is William Harris, superintendent of the Decatur Public Schools. He was graduated from the Eastern Illinois State Teachers College, Charleston.



COLLEGE TEACHER

In Illinois are approximately 6,900 college and university teachers employed in 57 different standard schools. Their positions demand wide training and experience as well as a high degree of specialization.

In the state elementary schools, women teachers greatly outnumber men. In the state high schools, approximately 57 percent of the positions are held by women. In the colleges and universities of the United States, 72 percent of the teachers are men. Open for men then, at present, are more positions in the college field.

To serve as a college instructor is to work with the future leaders of the nation, is to create and invent, is to exert community influence. He who succeeds will be paid by a comfortable living and a feeling of being appreciated, the only coin that can be, in the end, worthwhile.

The science instructor in Illinois Wesleyan University, Bloomington, is Virgil Bolen, a Western Illinois State Teachers College, Macomb, alumnus.

Teacher as well as director of the University of Illinois extension division and summer session is Robert Browne (left), a Southern Illinois State Normal University, Carbondale, graduate.

COLLEGE PRESIDENT

Two of the Illinois State Teachers Colleges are headed by men who approximately 25 years ago were teachers college students themselves.

The field of college administration grows wider and more interesting each year as college enrollments increase and educational budgets of necessity expand. Women, too, are eligible for many types of special positions on the college administrative staffs although few attain the privilege of serving as college president.

"I would rather die than fail," one man said to his wife when stepping into a college presidency many years ago. That is the type of man that has made education in the United States what it is today. And that is the type of young man who is still needed in educational work.

President of the Eastern Illinois State Teachers College, Charleston, is R. G. Buzzard (above), a graduate of Illinois State Normal University, Normal. President of his alma mater is Roscoe Pulliam (right center) of the Southern Illinois State Normal University, Carbondale.

THE TEACHERS IN THE PICTURES

THE Illinois teachers shown on the preceding pages did not acquire their positions by chance. With high school diplomas in hand, they answered the question facing you today and decided to enroll for professional training in the Illinois State Teachers Colleges.

Yours is the same opportunity.

The person who remarked that the time to look for a position is four or five years before it is wanted, offered sound advice. Jobs may be secured for short periods on brief notice, but good positions demand thorough training.

More than 80 years ago the State established a school for the education of teachers. Today enrolled in the five state-supported teachers colleges each fall are approximately 7,400 students; between 1,500 and 1,600 are graduated annually from the two- and four-year courses. Of these about three-fourths are teaching the year immediately following their graduation.

Your interests are important.

No professional career can be followed successfully by one who does not like his work. If you have an aversion to teaching, do not consider making it your life work. You will not be successful. If you like to study and enjoy human companionships, you will wish to learn more about the profession. It may offer you the opportunity for success that you deserve.

Your abilities are significant.

Teachers, parents, and friends can aid you in analyzing your own capabilities. After you have studied further the requirements of teaching, ask them to help you judge your accomplishments and your general fitness for the profession.

Students who have had successful high school careers usually adjust themselves readily to college life. Teaching is not easy; neither is the preparation for teaching. But for those who have genuine ability and an interest in the profession, life in a teachers college is a happy prelude to a life of service. For the teacher, Henry VanDyke said, "shares with boys and girls the best treasures of his mind. He lights many candles, which, in later years, will shine back to cheer him. This is his reward."

SUGGESTED READINGS

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CHASE, MARY ELLEN. *A Good Fellowship*. New York: The Macmillan Company, 1939.

LEE, EDWIN A. *Teaching As a Man's Job*. Homewood, Ill.: Phi Delta Kappa, Professional Education Fraternity, 1938.

MORGAN, JOY ELMER. *Shall I Become a Teacher?* Personal Growth Leaflet, No. 12. Washington, D. C.: National Education Association.

PHELPS, WILLIAM LYON. *The Excitement of Teaching*. New York: Horace Liveright, Inc., 1931.

On the campuses of the Illinois State Teachers Colleges are buildings of all types meeting the needs of many departments.

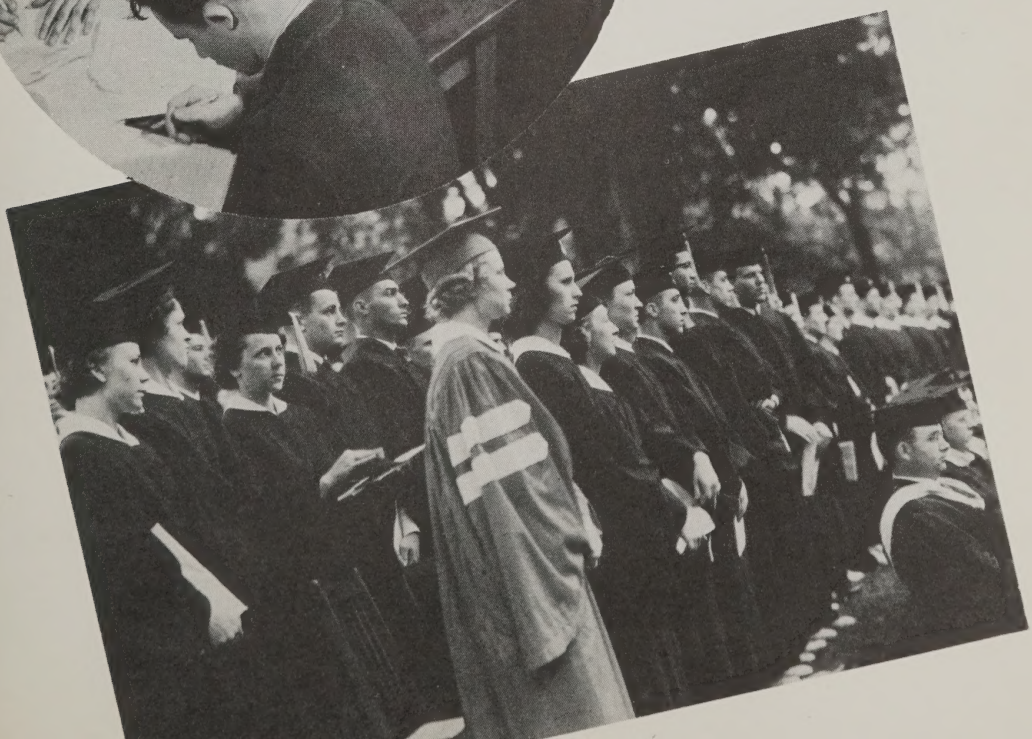
Both traditional and modern in their architectural style, these include general administrative structures, training schools, science halls, gymnasiums, libraries, and dormitories. Some schools have special housing provisions for agriculture, home economics, or industrial arts departments.

And a community center in each locality is the state teachers college auditorium.

PROGRAMS of the State Teachers Colleges center around class work, student teaching, and extra curricular activities.

Cultural and general background courses are offered. Advanced instruction in fields of specialization is given. And through observation as well as teaching under supervision in the training schools, students learn to coordinate theory with practice.

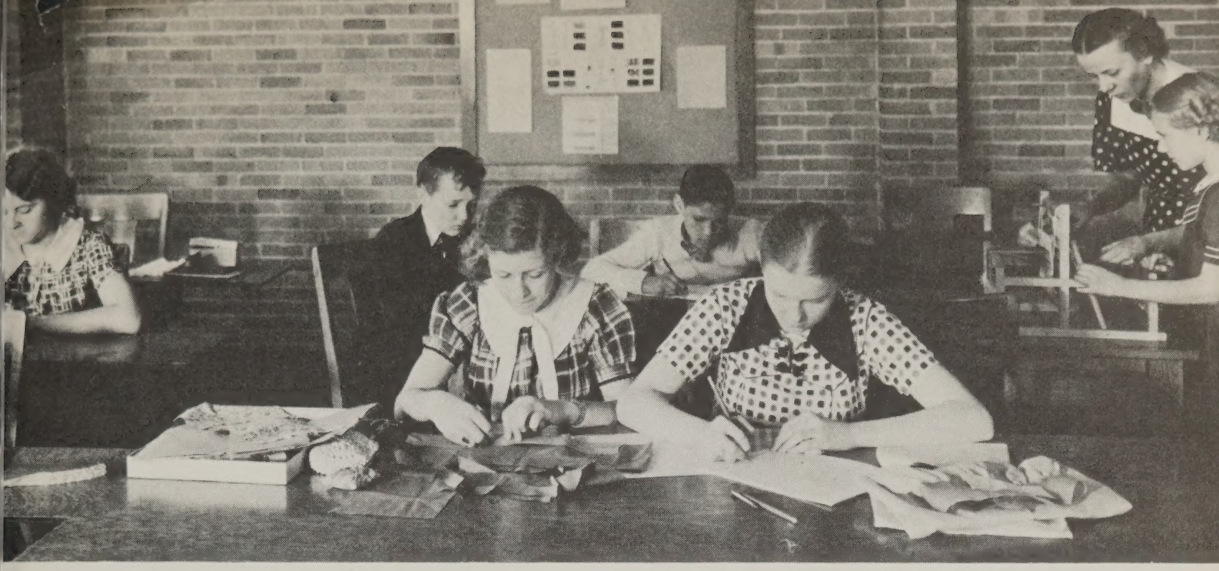
In athletic, music, speech, and all types of extra curricular activities, the teachers college student participates. As a future public school teacher, the student learns to enjoy and direct those essentials of the modern school program.



THE STATE TEACHERS COLLEGE program of service does not terminate with the offering of professional education.

An appointments bureau or placement office in each college recommends graduates for positions, follows their progress through the years, and aids them to obtain professional promotions.

School administrators are turning in increasing numbers to the college bureaus for assistance in securing experienced as well as beginning teachers. For in the files of the college placement office are pertinent data concerning thousands of Illinois teachers.



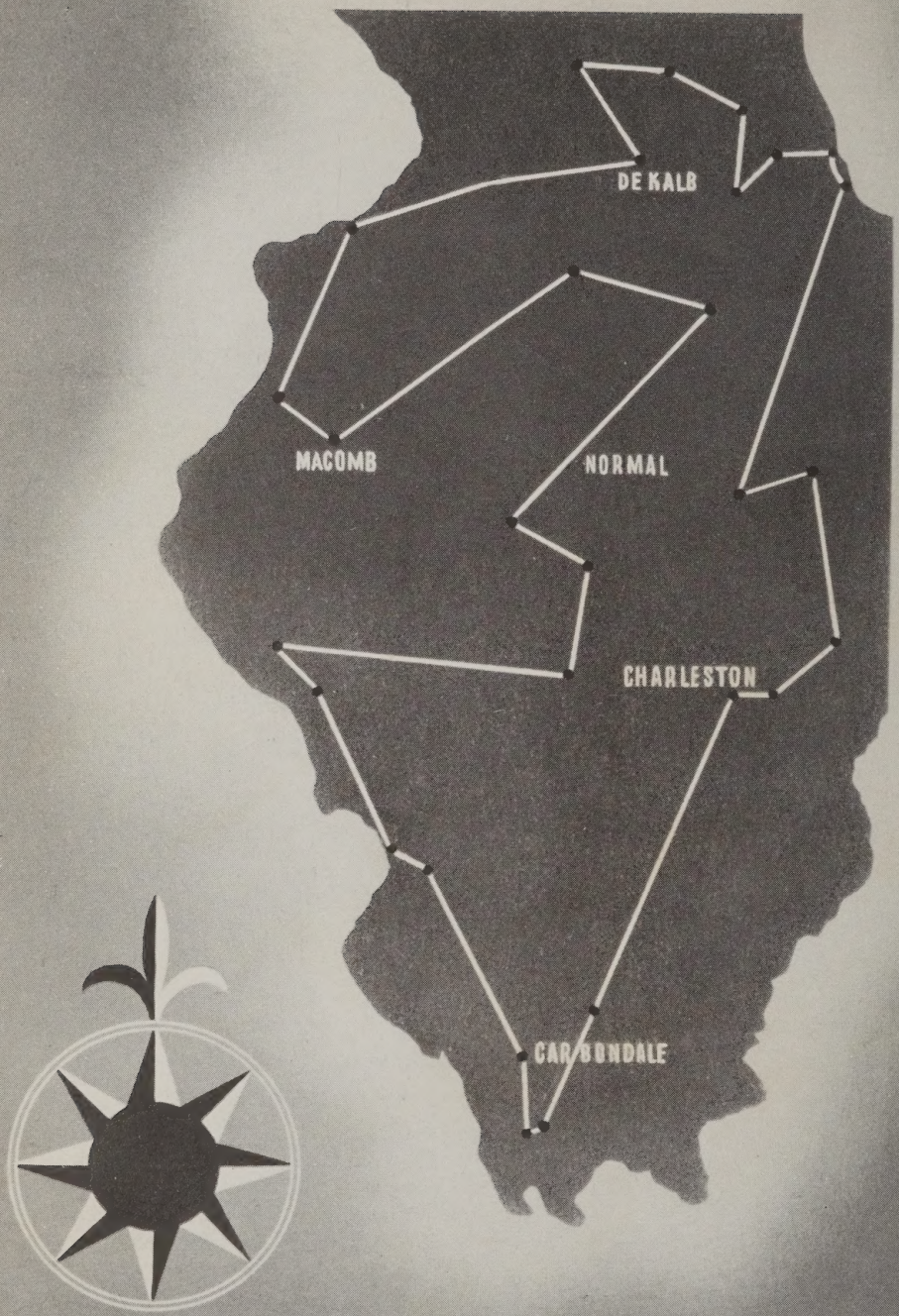
Where Are the Illinois State Teachers Colleges? Southern Illinois State Normal University is at Carbondale; the Eastern Illinois State Teachers College is in Charleston; the Northern Illinois State Teachers College is located at DeKalb; the Western Illinois State Teachers College is in Macomb, and the Illinois State Normal University is at Normal.

What Is the Cost of Attending an Illinois Teachers College? There is no tuition for students preparing to teach. Registration fees, book rentals, laboratory and student activity fees are approximately $60.00 each school year. A liberal allowance for all college expenses, including room and board, is approximately $400.00 a year.

Are There State Scholarships Available? State scholarships annually entitle one graduate from a high school of less than 500 students, two graduates from high schools of 500 to 1,000 students, and three from high schools of more than 1,000 students, to exemption from such general fees as are remitted to the state treasurer while attending any of the Illinois State Teachers Colleges for four years. Upon nomination by high school principals and certification by county superintendents, state scholarships are issued by the superintendent of public instruction to those graduates who rank highest in their respective classes and wish to prepare for teaching.

Lindley scholarships, issued prior to 1936 but no longer authorized, are still valid.

Who Provides Information About the Teachers Colleges? *The Registrar* at each institution will mail bulletins and other information to interested persons and answer questions regarding the college.



Route of Photographer and Location of Illinois State Teachers Colleges

Southern Illinois Normal University, Carbondale — Northern Illinois State Teachers College, DeKalb
Eastern Illinois State Teachers College, Charleston — Western Illinois State Teachers College, Macomb
Illinois State Normal University, Normal